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CHRONICLE OF THE WORLD HEALTH ORGANIZATION

NUTRITION IN LATIN AMERICA AND SOUTH AND EAST ASIA
NATIONAL COMMITTEES ON VITAL AND HEALTH STATISTICS
WHO'S ROLE IN VITAL AND HEALTH STATISTICS
CHANGING STRATEGY IN MALARIA CONTROL

REPORTS OF EXPERT GROUPS
NOTES AND NEWS
REVIEW OF WHO PUBLICATIONS

WORLD HEALTH ORGANIZATION
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The World Health Organization (WHO) is a specialized agency of the United Nations and represents the culmination of efforts to establish a single intergovernmental health agency. As such, it inherits the functions of antecedent organizations such as the Office International d'Hygiène Publique, the Health Organization of the League of Nations, and the Health Division of UNRRA.

WHO had its origin in the proposal made at the United Nations Conference held in San Francisco in 1945 that a specialized agency be created to deal with all matters relating to health. In 1946, representatives of 61 governments met at the International Health Conference, New York, drafted and signed the WHO Constitution, and established an Interim Commission to serve until the Constitution could be ratified by 26 Member States of the United Nations. The Constitution came into force on 7 April 1948, the First World Health Assembly met in Geneva in June 1948, and on 1 September 1948 the permanent Organization was established.

The work of the Organization is carried out by three organs : the World Health Assembly, the supreme authority, to which all Member States send delegates ; the Executive Board, the executive organ of the Health Assembly, consisting of 18 persons designated by as many Member States ; and a Secretariat under the Director-General.

The scope of WHO's interests and activities exceeds that of any previous international health organization and includes, in addition to major projects relating to malaria, tuberculosis, venereal diseases and treponematoses, maternal and child health, nutrition, and environmental sanitation, special programmes on public-health administration, epidemic diseases, mental health, professional and technical training, and other public-health subjects. It is also continuing work begun by earlier organizations on biological standardization, unification of pharmacopoeias, addiction-producing drugs, health statistics, international sanitary regulations, and the collection and dissemination of technical information, including epidemiological statistics.

* * *

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SCHEDULE OF MEETINGS

1-6 November	**Expert Committee on Mental Health, fourth session, Geneva**
15-27 November	**Malaria Conference for the Western Pacific and South-East Asia Regions, Manila**
6-11 December	**Joint WHO/FAO Expert Committee on Meat Hygiene, first session, Geneva**

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NUTRITION IN LATIN AMERICA AND SOUTH AND EAST ASIA

Nutritional diseases are common in many parts of the world, their nature differing largely according to the staple foods of the region. While some problems in nutrition stem from actual lack of food or of certain elements in the diet, because of economic, social, or agricultural conditions, others are a matter of education, of teaching people the proper utilization of the foods that are available. Both types of problem have been the object of considerable international study and action in recent years.

Progress resulting from such efforts and problems still to be solved were discussed at two regional nutrition conferences sponsored jointly by FAO and WHO in 1953. One of these conferences, for south and east Asia,[1] was held in Bandung, Indonesia; the other, for Latin America,[2] was held in Caracas, Venezuela. Among the principal subjects considered at these meetings, and reported in FAO publications, were protein malnutrition and endemic goitre. The information which follows is drawn from the sections of the conference reports dealing with these particular topics.

PROTEIN MALNUTRITION

Latin America

Protein malnutrition is a serious problem in mothers, infants, and children in many areas of Latin America. In children, it manifests itself in a syndrome known, in Spanish, as " síndrome pluricarential infantil " in this region, and by other names, " kwashiorkor " in particular, in other parts of the world.[3] Its characteristics are similar to those described elsewhere,[4] but certain aspects of the disease as observed in Latin America warrant specific mention.

Retarded weight and height are probably the earliest manifestations of kwashiorkor in this region. Cutaneous lesions characterized by zones of hyperpigmentation are found over wide areas of the body, most commonly on the external surfaces of the thighs, the hips, the abdomen, and the back. This dermatosis begins with small erythematous areas which become confluent and pigmented and then desquamate, leaving a smooth, transparent, and depigmented epidermis and giving the skin an irregular, mosaic appearance. Alterations in the colour, texture, and amount of hair are less well defined than in the syndrome as described in Africa.[5] Enlargement of the liver is not generally a very prominent feature of the disease in Latin America.

Deficiencies of other nutrients frequently associated with protein malnutrition vary from one country to another: in one country, hemeralopia and xerophthalmia are associated with protein malnutrition in one-third of the reported cases; in other countries, deficiencies of vitamins of the B complex often accompany the syndrome.

The low consumption of foods rich in protein—milk, meat, fish, eggs, etc.—in Latin American countries is due to the insufficient production and the high cost

[1] Food and Agriculture Organization of the United Nations (1954) *Report of the Nutrition Committee for South and East Asia, third meeting (FAO Nutrition Meetings Report Series* No. 6), Rome

[2] Food and Agriculture Organization of the United Nations (1954) *Report of the Third Conference on Nutrition Problems in Latin America (FAO Nutrition Meetings Report Series* No. 8), Rome

[3] An article on a recent survey of protein malnutrition in children in Central America, by M. Autret and M. Behar, will appear in a forthcoming number of the *Bulletin of the World Health Organization.*

[4] See *Wld Hlth Org. techn. Rep. Ser.* 1953, 72, 20.

[5] See, for example, Brock, J. F. & Autret, M. (1952) *Kwashiorkor in Africa* (*World Health Organization: Monograph Series* No. 8), Geneva.

of such foods. Persons with limited economic resources are usually the most affected. In some areas, the protein deficiency is only part of a general insufficiency of calories and of essential nutrients. The most vulnerable groups of the population are pregnant and nursing women and infants and pre-school children.

In Latin America, as in other parts of the world, the protein deficiency syndrome makes its appearance principally during or shortly after weaning, particularly in the age-group between 18 months and 4 years. Where, for economic or cultural reasons, breast-feeding is prolonged (even up to two or three years of age in some areas), infants may be protected from malnutrition, provided the milk supply is adequate. It is in groups which are weaned early that the syndrome most frequently develops. The early weaning may probably be attributed to the poor nutrition of the nursing mother and to the consequent decrease or cessation of milk secretion, or, in urban areas, to the need for the mother to work outside the home. The artificial feeding which becomes essential with weaning presents both economic and cultural difficulties. The diet of infants tends to be deficient in both quantity and quality; it is composed mainly of carbohydrate (corn, yuca, polished rice, potatoes, beans, and similar foods) and contains only small amounts of animal protein.

In addition to dietary deficiency, lack of attention to hygiene contributes to the appearance of kwashiorkor, which is often precipitated or aggravated by gastro-intestinal or other disorders. This is particularly true in underdeveloped communities. Digestive disturbances make it difficult to administer appropriate diets and contribute to the severity of the disease—in many cases even to the death of the patient.

Studies of the long-term effects of protein malnutrition are inadequate at present, but there are indications that its sequelae are of great public-health importance. The retardation of growth, the visceral lesions, and other pathological changes may do irreparable damage. Protein malnutrition may also be a factor in the morbidity and mortality from other diseases, such as tuberculosis, in young children. A high incidence of the syndrome among children suggests under- and mal-nutrition of the population as a whole, and this reduces national output, including the production of food, which thus aggravates the problems of nutrition. Protein malnutrition is therefore a significant public-health problem.

Treatment of kwashiorkor is based in Latin America, as elsewhere, on milk. In some countries of the region, acidified milk is used. It is possible to give a child 3-4 g of protein per kilogram of body weight per day in this form, which is particularly good in cases with hypochlorhydria. Some workers believe that, although skim milk is most effective for initial treatment, whole milk is to be preferred once the acute period has passed. The use of lipotropic factors is recommended by some paediatricians, especially in severe cases with fatty livers and disturbances of pancreatic function.

Treatment should be based on natural foods rather than pharmaceutical preparations, but the administration of vitamins A, D, and C is advisable when there are signs of deficiency of these vitamins. Vitamins of the B complex should be given with great caution and only when clinical and laboratory findings justify their use. Antibiotics may be used to advantage in treating associated infections, particularly those of the respiratory tract.

Prevention of protein deficiency calls for consideration of economic, social, and cultural factors as well as of health measures, and requires co-operation among departments of health, agriculture, commerce, and education. The improvement of the diets of infants, young children, and pregnant and nursing women—the first essential in pre-

vention—can often be best achieved through, and as part of, public-health programmes. The education of the public with regard to nutrition can be effectively carried out by public-health personnel. It is also the responsibility of public-health services to demonstrate the effects of protein malnutrition on the poorer sections of the population, bringing the problem to the attention of other government departments, since eliminating the disease is dependent upon improving socio-economic conditions and increasing food production.

Specific measures which may be applicable to many areas include the development of dairy industries and efforts to improve the distribution of milk; study of locally available foods—e.g., soya bean milk, and combinations of yuca (manioc) flour and casein, wheat flour and soya, and maize and powdered milk—for infant and child feeding; the development of fishing industries and production of fish flours; teaching better dietary habits; and feeding programmes of various types, particularly for the more vulnerable groups of the population.

South and East Asia

Malnutrition associated with protein deficiency is also an important problem in many countries of south and east Asia.[6] It seems to be widespread among infants and children in India, Indonesia, and Indo-China; and cases have been reported in the Philippines, Malaya, and Fiji.

In this region, too, there are some characteristics of the protein deficiency syndrome which differ from those found in other parts of the world. In Indonesia, oedema is not a constant feature in children with other signs of the deficiency, but liver enlargement is usually found. In India, liver enlargement is a constant feature; in Indo-China, in the deficiency state known as "Boufissure d'Annam", the liver shows areas of necrosis in addition to steatosis. Another syndrome observed in this area and believed to be associated with protein malnutrition is "violent malignant syndrome", which occurs frequently among breast-fed infants, is characterized by convulsions, and has a high mortality-rate. Dyspigmentation of the skin and hair does not seem to be characteristic of protein deficiency in either India or Indo-China. In Indonesia, a change in the bulbar conjunctiva, with an altered appearance of the limbus corneae, is thought to be a sign which can be used in early diagnosis.

Throughout the region, other nutritional deficiencies are commonly associated with protein malnutrition: in Indonesia, the majority of children with advanced protein malnutrition show signs of vitamin A deficiency, particularly xerophthalmia; in India, keratomalacia, angular stomatitis, and cheilosis have been found in conjunction with protein malnutrition; and in the Philippines, deficiency of vitamin A and ariboflavinosis frequently accompany protein deficiency.

Protein deficiency states are usually observed in children in the weaning and post-weaning ages, particularly between 9 and 36 months, though sometimes, in cases of early weaning, even as early as three months. In general, children in the region are fed on rice gruel when they are weaned, and no particular attention is paid to providing the proper diet. The nutrition of the mother is also an important factor. There is some evidence that changes characteristic of protein deficiency—e.g., fatty infiltration of the liver—may occur in intro-uterine life; and lesions of the pancreas are found in premature and stillborn babies. The diet of pregnant and nursing women is determined in some countries by cultural and social as well as economic factors, and these must be studied and as complete a picture of dietary patterns

[6] A monograph on infant nutrition in the subtropics and tropics will be published by the World Health Organization early in 1955.

as possible be obtained when improvement programmes are planned.

With regard to treatment, reliance on skim milk protein (and appropriate vegetable protein mixture in mild cases) is considered satisfactory. It is noted, however, that in very critical cases blood transfusion can be recommended in addition to the proper dietary therapy.

In this region, as elsewhere, there is little direct information on the long-term effects of protein malnutrition. Attempts have been made to study the effects on the liver, however. There has been some tendency to link untreated protein malnutrition with fibrosis of the liver and progressive cirrhosis, followed in turn by malignant lesions. But, in a limited investigation in Indonesia, liver biopsies showed no increase in fibrotic tissue in patients with the syndrome who were observed over a period of many months; the impression was gained that fibrosis of the liver associated with malnutrition is of slow development. Also of interest are observations in Indonesia regarding the possibility that the sub-optimal physical development of adults in many parts of the world may be due to protein deficiency in the diet: in a population group in which cassava replaced rice as the staple food about twenty years ago, men in the fourth and fifth decade of age are taller and better developed physically than those in the second decade.

Prevention of protein malnutrition depends in Asia as in Latin America on appropriate production, distribution, and preservation of food; public-health measures; and education. Attention must be given particularly to questions concerning the supply of milk; to increasing fish supplies and utilizing fish flours; and to the possibility of using soybeans (some countries have successfully used milks made from soybeans or from soybeans combined with peanuts and malt) and other pulses, coconuts, and mixed food preparations which may supply the necessary nutrients. Improvement in nutrition requires the combined efforts of public-health, social welfare, agricultural, and educational agencies in programmes whose immediate aim should be to encourage and aid the development and use of protein-rich foods for infant and child feeding and to educate the public in principles of healthful diet.

ENDEMIC GOITRE

Latin America

Although surveys of the incidence of endemic goitre have been made in most of the countries of Latin America, in few countries have specific measures been taken for its prophylaxis. The nutrition conference therefore undertook to summarize the data available, to orient future studies, and to give practical guidance in the solution of the problem, which is a serious one in many Latin American countries.

By the term " endemic goitre " is meant " a visible or palpable hypertrophy of the thyroid gland found in a number of individuals in a limited geographic area ". It is known that endemic goitre is present in more than 50% of the population of certain areas in Argentina, Bolivia, Brazil, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, and Peru. In general, mountainous and highland areas are those with the highest incidence. Cretinism associated with endemic goitre was reported in nine of the countries represented at the conference, and deaf-mutism from this cause was considered to occur in at least six.

The following statement concerning the etiology of endemic goitre was accepted at the conference: " The immediate cause of simple goitre is the failure of the thyroid gland to obtain a supply of iodine sufficient to maintain its normal structure and function; this failure is usually produced by an absolute environmental deficiency of iodine

or by factors which interfere with the utilization of dietary iodine or which impose an abnormal demand on the thyroid gland." Combating the condition therefore begins with estimating the physiological requirements for iodine, a subject considered at some length in the conference report :

" Balance studies have indicated that the requirement for iodine is probably about 0.002 to 0.004 milligrams daily for each kilogram of body weight. The need for iodine is increased during adolescence in girls, during pregnancy and probably during growth. Certain other physiological and pathological states may also be associated with an increased requirement.

" These figures indicate an average requirement of 100 to 300 micrograms daily for an adult, depending upon body weight. Three hundred micrograms will probably satisfy the iodine requirements of a large majority of a population when goitrogenic factors are not of importance. There are, however, a number of such factors tending to produce goiter by increasing the relative requirement for iodine. Among these are compounds present in cabbage, kale, brussels-sprouts, ground-nuts, soya and other foodstuffs. The ingestion of an excessive amount of calcium can increase the iodine requirement, as can also deficiency of vitamin A. There are also other factors, still unidentified, which have the same effect.

" In El Salvador and Guatemala, the iodine content of fresh sea salt as produced is from 2 to 8 parts per 100,000. Despite this, the incidence of endemic goiter in these two countries is high. Even though the actual iodine content of the salt as consumed is unknown because appreciable losses may occur in a relatively short time, it probably does not fall below the 1 part in 100,000 recommended by the WHO Study Group on Endemic Goiter as an appropriate level for the iodization of salt.[7]

" These findings imply the existence of goitrogenic factors in Central America and without doubt in other Latin American countries. One of the most important of these may be the lack of sufficient vitamin A, since dietary surveys have demonstrated that this is among the principal deficiencies of the diet in most of the countries. These considerations led the Conference to the conclusion that the average requirement for adults in Latin America approximates to 200 micrograms of iodine daily.

" Since the average requirement never satisfies the needs of all the population, especially during adolescence, pregnancy and other periods of physiological stress, and since no adverse effects have been demonstrated from the continued ingestion in the United States and Canada for many years of salt and salt iodized at a level which results in an estimated daily iodine intake of 800 micrograms, the Conference proposed that the recommended daily allowance should be double the postulated average daily requirement. On this basis, 400 micrograms of iodine daily is an amount which will satisfy the requirement of nearly all the population."

[7] See *Bull. Wld Hlth Org.* 1953, 9, 295.

Though emphasis in solving the problem of endemic goitre should be on prophylaxis, treatment must receive some attention. The various measures which are available for treatment, and which may be usefully applied in certain population-groups such as schoolchildren and pregnant women, include the administration of a saturated solution of potassium iodide in water, or Lugol's solution (one drop in liquid daily for one week, one drop three times a week for three weeks, and one drop per week indefinitely thereafter), or of tablets containing 10 mg of potassium iodide (one tablet daily for 20 consecutive days, the treatment to be repeated every six months). Such measures should be considered temporary and for use only in individual treatment.

Prophylaxis, directed towards satisfying as nearly as possible the iodine requirement of the entire population, should be permanent and should be achieved in an economical and practical way. " All the accumulated experience indicates that the best method of prevention is the consumption of salt which has been artificially iodized..." For Latin American countries, one part of iodine in 20,000 is considered a minimum level for the iodization of salt, and one part in 10,000 as a maximum level, the higher concentration to be selected where there is reason to believe that there are goitrogenic factors, a low consumption of salt, or an important loss of iodine from the iodized salt. Potassium iodate seems to be more practical than potassium iodide for use in the iodization of salt in Latin America, chiefly because of its

greater stability. In any country in which endemic goitre is a public-health problem, legislative provision should be made for the compulsory iodization of salt.

South and East Asia

Endemic goitre is found in many different areas of south and east Asia—in India, Indo-China, Indonesia, and Thailand. The nutrition committee for this region directed the attention of governments concerned to the iodization of salt as an effective and efficient means of preventing goitre.

An interesting investigation of different methods of goitre prophylaxis is being undertaken by the Government of India. Three comparable population-groups are to be studied : one will serve as a control, the second will be given salt enriched with iodide, and the third will be given salt enriched with iodate. The three groups are to be surveyed before the introduction of the iodized salt, at regular intervals during a period of five years, and at the end of the trial. The whole scheme will be under medical supervision, and the possibility of toxic effects of the iodized salt will receive particular attention.

NATIONAL COMMITTEES ON VITAL AND HEALTH STATISTICS *

In whatever way it conceives its needs for vital and health records and statistics, or even if it prefers to believe it can get along without them, no national administration can avoid responsibility for making the best use of its resources. To take a common example, let us suppose it wants to begin a malaria-control programme. Obviously it cannot spray everywhere. It needs some measurement of where and to what extent the problem is concentrated, in terms of malaria incidence and mortality; and, when the control programme is under way, it will need statistical measures of its effectiveness.

To take an extreme example, let us suppose that the country has virtually no statistics of any kind—no census, no morbidity reporting whatever, no mortality reporting. Aside from general impressions, gained from the patient-loads of its physicians and the continual processions of funeral cortèges, the country would not know the extent of its malaria problem and would be hard put to formulate an intelligent control plan. Should it begin by establishing a long-range national morbidity reporting scheme ? Probably not. It would most likely do the best it could with spot studies, using physicians' records and hospital records to the extent available, and trying to generalize from these specialized samples to the general population. The country would face a difficult dilemma : to rely on building a national system of comprehensive health statistics would take decades and have no application to the immediate problem; to rely solely on spot studies, without adequate population and vital statistics as a base, would never fully answer the questions, since the results of the studies could not be related to the general population.

Actually there is no way out of the dilemma but to accept the objective—to produce satisfactory vital and health records and statistics, as needed by the country according to the nature and stage of its economic development. In the present instance, this would mean improvising some general statistics by way of spot studies and beginning, as soon as feasible, to build the long-

* Extracts from article by H. L. Dunn in *Bull. Wld Hlth Org.* 1954, 11, 147

range statistical programme best suited to its resources and needs. It should be self-evident that in each country the objective will pose unique problems, so that international generalizations as to the specific content of the statistical programme can never take the place of specific study within the country.

Even so widely accepted a generalization as the necessity of maintaining complete and accurate registration of vital events—births, deaths, marriages, divorces, adoptions, etc.—does not apply equally to all countries. In some countries, particularly those with large nomadic populations, most of the people may have little or no use for vital records and hence no incentive to register vital events. In general, the use of vital records develops as the country establishes school systems, pension and social security plans, and other programmes that require people to prove who they are—identity, age, residence, citizenship, marital status, and other personal facts. Thus, the development of a comprehensive vital records system is at once a sign of a country's social and economic progress and a condition to its progress. One of the difficult problems that face health statisticians in each country, therefore, is the question of how rapidly, how comprehensively, and in what detail to develop its vital records and statistics system. If the problem is not under continuous study by the country's official statistics agency, this field alone would justify and provide worth-while activity for a national committee on vital and health statistics.

It cannot be too much emphasized that neither international recommendations nor study within another country can ever take the place of first-hand study of a country's own unique complex of needs. To take a final example, several countries may have a pressing need for, and the technical capacity to establish, sickness-survey mechanisms to determine the current extent and type of illness in the general population. But in another country, where all but minor illnesses are invariably treated in hospitals, the reservoir of hospital statistics, if properly collected and tabulated, might be entirely adequate to meet the country's needs for sickness data.

In this connexion it should be mentioned that a wide variety of types of morbidity statistics has recently been classified according to uses and applicability to various types of countries. This classification, which is taken from the third report of the WHO Expert Committee on Health Statistics,[1] is given in table I. My purpose in including this material, apart from its intrinsic interest, is to illustrate the fact that some types of data are useful or applicable in all countries while other types apply only in countries with highly developed statistical systems.

But even with the classification published and available, it would still be necessary for each country to decide for itself which types of morbidity data to use, which types not now existing should be collected, and for what purposes. It is not reasonable to insist that such study and recommendations can be made through no means other than a national committee on vital and health statistics. The important point is that here is one potential use of the national committee, and that in the absence of a committee perhaps the job is being overlooked.

The idea of national committees was born at the International Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death, held in Paris during the spring of 1948. From the beginning, it was clear that two types of tasks were of concern to the national committees—the first dealing with the introduction of national viewpoints into international problems of standardization of procedures and classifications needed for vital and health statistics at the international level; and the second, with the production of

[1] *Wld Hlth Org. techn. Rep. Ser.* 1952, 53

TABLE I. TYPES AND USES OF MORBIDITY STATISTICS AND APPLICABILITY TO COUNTRIES IN VARIOUS STAGES OF DEVELOPMENT

Type of morbidity statistics	Coverage		Uses †	Applicability ††
	population *	morbidity **		
Sickness surveys by home visitation of :				
all persons in selected area	X	1-4	b, c, d, e	ABC
representative sample of selected area	X	1-4	b, c, d, e	(A)BC
representative sample of whole population	W	1-4	b, c, d, e, h	C
Mass diagnostic and screening surveys (tuberculosis, etc.)	XY	3	a, d	ABC
Census enumeration of sick persons	W	3	d, h	BC
Census enumeration of certain defects	W	3	h	BC
Records of notifiable communicable diseases	WX	4	a, b, d, e, f	BC
Registration of certain diseases (cancer, rheumatism, etc.) with or without follow-up survey	WX	4	c, d, f, g, h	C
Certification of certain conditions for special benefits (including special food allowances)	W	4	b, d	C
Records of road accidents	WX	4	b	C
Records of industrial and occupational accidents and diseases	Y	4	b	C
General hospital inpatient records	Z	2-4	c, d, f, g	ABC
General hospital or clinic outpatient records	Z	4	c, d	ABC
General home-visiting and nursing services	Z	4	d	BC
Records of special clinics, hospitals, and agencies (tuberculosis, mental diseases, venereal diseases, dentistry, etc.)	Z	4	b, c, d, f, g	ABC
Continuous records of doctors' practices	Z	2, 4	d	BC
Social-security schemes, compulsory and voluntary	Y	1-4	c, d, e	BC
Voluntary health plans and funds	Y	1-4	c, d, e	BC
Pensions and veterans' records	Y	3, 4	d, g	C
Life-insurance and sickness-insurance records	Y	3, 4	e, f	BC
Records of health welfare centres (maternity, infant, and preschool child)	(Y)Z	3, 4	b, c, d, f	BC
Medical records in educational institutions (routine inspections, sickness, absenteeism)	Y	1-4	a, b, d	BC
Records of physical examinations and sickness absenteeism in industrial, civil service, and other occupational groups	Y	2-4	b, c, e	ABC
Sickness and recruitment records of the armed forces	Y	1-4	a, b, g, h	(A)BC

* **Coverage of population :**

- **W. Whole population of country (or representative sample of it).**
- **X. Population of selected locality (or sample of it).**
- **Y. Selected types of persons in whole population (or samples of them).**
- **Z. Persons applying to selected health services.**

** **Coverage of morbidity :**

1. **All sicknesses at a point of time.**
2. **All sicknesses during a period of time.**
3. **Selected diseases or impairments at a point of time.**
4. **Selected diseases or impairments during a period of time.**

† **Uses of morbidity statistics :**

- **a. Control of communicable diseases.**
- **b. Planning for development of preventive services.**
- **c. Ascertainment of relationship to social factors.**
- **d. Planning for provision of adequate treatment services.**
- **e. Estimation of economic importance of sickness.**
- **f. Research into etiology and pathogenesis.**
- **g. Research on efficacy of preventive and therapeutic measures.**
- **h. National and international study of distribution of diseases and impairments.**

†† **Classification of countries :**

- **A. Countries with no complete enumeration of population and lacking, or with only slightly developed, public-health and vital registration systems.**
- **B. Countries with an overall or partial census and with a well-developed public-health and vital registration system for parts of the population (e.g., for large towns) but not for all.**
- **C. Countries with an overall census and well-developed facilities for obtaining morbidity statistics.**

satisfactory national statistics in the fields of vital statistics and health.

While the concept of national committees emerged at the Sixth Decennial Revision Conference, the groundwork for it was laid in actions of the Fifth Decennial Revision Conference held in 1938. At that time, much interest was expressed in the experiments in the USA in coding joint causes of death, the situation in which more than one cause of death appears upon the death certificate. The conference requested the USA to continue its investigation in this field on a wider basis and in co-operation with technicians of other countries. It was also requested that "the Joint Committee appointed by the International Institute of Statistics and the Health Organisation of the League of Nations undertake, as in 1929, the preparation of international lists of diseases... Pending the compilation of international lists of diseases, the Conference recommends that the various national lists in use should, as far as possible, be brought into line with the detailed International List of Causes of Death..." [2].

Acting upon the request of the international conference, the Secretary of State of the United States Government in 1945 appointed the United States Committee on Joint Causes of Death, which was expanded to include representatives of the Canadian and British Governments and of the Health Organisation of the League of Nations. In addition to its major assignment, the committee came to grips with the second request of the conference—to see what might be done to prepare an international list suitable for the purpose of coding morbidity. The resultant draft of a classification, which was a combined morbidity and mortality code, was tried out in various hospitals in the three countries, adjusted, and turned over to the interim World Health Organization for its use and disposition; after modification to reflect the viewpoints of the countries, it became the principal document used at the Sixth Decennial Revision Conference.

The conference participants were impressed by the success of this activity. After clearing other items on the agenda, the conference addressed itself to the question of whether some of the other problems in the fields of vital and health statistics should be handled in a similar manner. Obviously, if this were to be done, the conference would have to request nations to undertake such activities, since international protocol would be necessary for nations to work on international technical problems. After considerable discussion, this led to the recommendation that all nations should designate national committees to work on problems of an international nature which were of particular concern to them.

Although the emergence of the concept of national committees and the impetus behind their creation arose from the desire to introduce national viewpoints into international technical problems, it was the second objective, namely, the improvement of the production of national vital and health statistics, that became the primary concern of national committees. It had been recognized by the conference that health organizations urgently require current, reliable, and comparable data in the fields of health and vital statistics, and that many of the national statistical mechanisms for producing such data were relatively primitive in character. It had also been recognized by the conference that there was an intimate relationship between vital records, vital statistics, morbidity statistics, and population statistics, and that many of the problems could not be solved unless the national technicians came to grips with the problems of producing satisfactory data in all these fields within their respective nations.

Yet nations vary greatly in their needs for such data. Countries with advanced econo-

[2] *Bull. Hlth Org. L.o.N.* 1938, 7, 949

mic development have complex needs, requiring an elaboration, scope, and detail utterly impractical for nations relatively underdeveloped economically, sparsely settled, and with little statistical mechanism to build on. However, as a goal, national committees were urged to study broadly the problem of producing satisfactory national and international statistics in the fields of health and vital statistics, and not to overlook the study of problems of producing health statistics related to the family structure and to the social, economic, and occupational background of individuals. The conference recognized that the national committees in the various regions of the world should pay particular attention to the types of statistics needed in their respective regions. For instance, the tropical countries should emphasize the study of the statistics needed for tropical-disease control, and the committees in countries facing the problem of population pressure and malnutrition should pay particular attention to the statistics needed for those problems. Furthermore, it urged that all national committees recognize the great value to be gained by close co-operation with schools of medicine and public health in the solution of the problems of statistical education and training in the fields of vital and health statistics.

Another major area of activity concerns the co-ordination of statistical activities within the country. For example, in Latin America, the production of vital and health statistics is split among three major branches of government—the " registro civil ", usually located in the department of justice; health statistics in the ministry of health; and vital statistics, ordinarily located in the department of commerce. Similar problems exist in many other parts of the world.

All this suggests that every country has a place somewhere in its pattern for a national committee. The scope of what is needed is so broad that a properly organized national committee, attuned to these broad problems, tends to fill in gaps not being taken care of by established official mechanisms.

In the author's judgment, the forms and patterns of national committees will vary as much in the future as they do now. The important unifying element is whether they accept and live up to a common set of objectives that are at once practical and noble. If they are actuated by similar goals and ideals, it is not of any great moment what particular niche they fill in their respective countries.

It is doubtful whether the national official statistics agency of any country would contend that it is doing everything necessary to put these objectives into full effect. To the extent that other tasks take priority and prevent the national agency from attending to the full list of objectives, the national committee has scope for useful work.

In all countries the national committees can make it their major business to keep the broad goals in view, and to help the country and its official agencies to strive persistently toward the country's own objectives. If the committee has no other function, it can be a prod, a spur, a stimulant; it should be the conscience of the statistics system.

Vital and Epidemiological Statistics

A recent number of the *Epidemiological and Vital Statistics Report* (volume 7, number 10) is devoted to tables of statistics on infant mortality and neonatal mortality in selected countries, and to statistics on cases of, and deaths from, a number of infectious diseases—epidemic typhus and other rickettsial diseases, cerebrospinal meningitis (meningococcal), chickenpox, and acute infectious encephalitis.

WHO'S ROLE IN VITAL AND HEALTH STATISTICS *

As the successor to the Health Organisation of the League of Nations and the Office International d'Hygiène Publique, WHO assumed the statistical obligations formerly laid upon these two organizations; in fact, many of WHO's statistical activities are a continuation of those initiated by the League of Nations. Another legacy, bestowed upon the Organization by the International Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death in Paris in 1948, is the improvement of international uniformity and comparability of statistics on morbidity and mortality.

Constitutionally, WHO is required to establish and maintain epidemiological and statistical services and to establish and revise, as necessary, international classifications of diseases and causes of death. Each Member State, in turn, is required by the WHO Constitution to "... report annually ... on progress achieved in improving the health of its people " and to " ... communicate promptly to the Organization ... statistics pertaining to health which have been published in the State concerned ", providing " statistical and epidemiological reports in a manner to be determined by the Health Assembly ".

How does WHO fulfil its statistical responsibilities ? A brief review of some of the Organization's activities may demonstrate its role in vital and health statistics.

International Statistical Classification

Among the Organization's first important acts were the preparation of the International Statistical Classification of Diseases, Injuries, and Causes of Death and the adoption of WHO Regulations No. 1 by the First World Health Assembly, to guide Member States in the application of the international classification in compiling health statistics. The *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* was published in English, French, and Spanish for use by health and statistical administrations. This was a big step forward in the improvement of the international uniformity and comparability of health statistics.

WHO Centre for Classification of Diseases

To aid in the solution of problems arising in the application of the international classification, the Organization established, in 1951 in London, the WHO Centre for Classification of Diseases. The Centre answers queries, provides assistance, and carries out investigations on factors affecting the comparability of statistics. In addition, it is working for the improvement of medical certification of causes of death, issuing instructions to guide physicians on the use of the International Form of Medical Certificate of Cause of Death which is contained in the *Manual.* Another of the Centre's concerns is the training of statistical coders : it collects information on the available experience in numerous countries and develops teaching materials and techniques.

The Centre's function is gradually undergoing a change. The queries which it has answered have suggested modifications and additions which should be considered in the next revision of the classification, and the Centre's role is increasingly becoming one of preparation for this revision (see page 336).

* Drawn from articles prepared by the Division of Epidemiological and Health Statistical Services of the World Health Organization and published in *Bull. Wld Hlth Org.* 1954, 11, 242-55

Expert committee

A WHO Expert Committee on Health Statistics has been established and, with the aid of various subcommittees, has considered a number of subjects, such as definition of stillbirth and foetal death, registration of cases of cancer, hospital statistics, and others. The committee provides the machinery by which questions relative to international nomenclature and classification of diseases, certification of deaths, and comparability of vital and health statistics may be considered.

Publications

WHO has, since its creation, maintained or resumed continuous publication of a series of weekly, monthly, and annual epidemiological and vital statistical periodicals inherited from the pre-existing international health organizations. Those issued at headquarters are the *Weekly Epidemiological Record*, now in its 23rd year; the monthly *Epidemiological and Vital Statistics Report*, now in its 24th year; and the *Annual Epidemiological and Vital Statistics*, now in its 31st year. A *Weekly Fasciculus* covering countries bordering on the Western Pacific and Indian Oceans has been issued at Singapore for 26 years; similar weeklies are issued in Alexandria and in Washington, where the Regional Office for the Americas also puts out a quarterly statistical publication.

Training of personnel

Another aspect of WHO's work in the domain of statistics is the training of statistical personnel. This activity takes two forms : the award of fellowships, and the sponsorship of seminars or training centres, in conjunction with the United Nations and with the governments of host countries. From 1947 through 1952, 55 fellowships in health statistics were granted. Seminars or training centres in Ceylon, Chile, Egypt, and Japan have provided instruction for 151 responsible officers engaged in the development of national statistical services. A training course for coders was given by the Organization in 1951 for 20 participants from 16 countries of the European Region.

In its programme of training statistical personnel, WHO emphasizes the applied side of statistics, in a desire to improve the quality and coverage of national statistics by more efficient use of the staff and resources already existing within each region and country.

CHANGING STRATEGY IN MALARIA CONTROL *

Malariologists and public-health services would be able to view with complete satisfaction the remarkable results of malaria control by means of DDT, which has been in progress for about ten years, if recent developments did not call for a revision of the present strategy.

By house-spraying with residual-action insecticides, one can aim not only at controlling malaria, but even at eradicating it. This, of course, does not mean or require eradication of the vector; it only means eradication of the malaria parasites. If transmission does not take place, malaria dies out spontaneously. Infection with *Plasmodium falciparum* generally lasts no longer than one year; with *P. vivax*, generally no longer than two, or, exceptionally, three or four. Only infection with *P. malariae* may persist throughout life, but it is not known for how many years it remains infective for

* Résumé of an article, by E. J. Pampana, which is to appear in a forthcoming number of the *Bulletin of the World Health Organization*

the mosquitos. Disregarding infection with *P. malariae*, which is by far the rarest of malaria infections and in many places is not present at all, it must then be admitted that, once the transmission of malaria in a country has been completely stopped for three or four years, there will be no more malaria parasites in the human or the mosquito host. Malaria control can then be withheld, provided the country concerned is protected from reimportation of parasites.

Certain countries have already achieved this objective. It was in 1953 that, in view of the experience of certain countries, particularly Greece, the Expert Committee on Malaria concluded that " the practice of discontinuing residual spraying, under proper safeguards, after several years of achieved malaria control, is both logical and feasible...".[1] It was thus recognized that expenditure on malaria control might be lightened after a few years, a consideration of great importance for highly malarious countries.

However, the requisite conditions for discontinuing residual-insecticide spraying are not fulfilled everywhere; in fact, few countries would be justified in discontinuing it at present. First of all, the discontinuation requires that transmission has not occurred for several years and therefore that malaria parasites in man or mosquito no longer exist in the given area. Further, the area where this end-point of transmission has been reached and maintained must be a major part of the territory, possibly so outlined as to have no endemic malaria on its borders or within them.

In planning for the interruption of insecticide spraying, various conditions must be borne in mind. First, within the area to be controlled, every locality where transmission is possible should be under control. Secondly, the assessment of the results should make it possible to determine accurately if and where total interruption of malaria transmission has been achieved. Current methods of assessment do not always seem sufficiently sensitive for this purpose : infant parasite-rates may have reached zero though some transmission is still occurring. Therefore, the localities should be visited regularly, and all subjects having fever or having had fever during the intervals between visits should have their blood examined. Such examinations, which are being carried out in Greece, should start at least one year before interruption of the spraying campaign is envisaged. Thirdly, malaria control should be undertaken with the greatest technical thoroughness, all at one time and in as large an area as possible, preferably bordered by areas where, naturally or as a result of control, there is also no transmission. The greater the extent to which adjacent areas or countries have been subjected to similar malaria-control measures, the less will be the danger of reintroduction of parasite carriers.

The resistance of insects to insecticides now complicates the planning of malaria-control programmes. Although " behaviouristic resistance " may not interfere with malaria control, acquired physiological resistance, when high, is bound to interfere. According to recent information from Greece, not only *A. sacharovi*, but also *A. maculipennis* and *A. superpictus* have developed some degree of DDT resistance. Evidence seems to indicate that in certain villages DDT failed to prevent transmission.

If this danger is ignored, resistance may develop after a large-scale programme has been under way for some years, may extend to other chlorinated-hydrocarbon insecticides, and may make necessary the use of other more dangerous and more costly insecticides. Health services may also have to avail themselves of the techniques of malaria control used previously, which, although more effective today than formerly, because of the new antimalarials now available, would be applied to populations which had

[1] *Wld Hlth Org. techn. Rep. Ser.* 1954, **80**, 24

lost the natural immunity conferred by endemic infection. To heed the warning from Greece means to plan the programme in such a way that house-spraying can be safely discontinued before insecticide resistance develops. The larger the area throughout which the end-point of transmission is attained at the same time, the more safely can the spraying be discontinued. To prevent the development of resistance, indiscriminate spraying and the use of the insecticide for larval control should be avoided.

It is realized that this new strategy, which must be applied to huge areas and which calls for thorough control for a number of years, will require more money, more trained personnel, greater efficiency of operations, and better systems of epidemiological surveillance than are necessary now. These difficulties would be counterbalanced by better and quicker results, and by the hope of seeing malaria become a less heavy burden on the budgets of health administrations after a few years. Should this strategy not be adopted, it is possible that house-spraying might remain effective but would have to be continued year after year; it is also possible, however, that resistance to insecticides might develop in anophelines, increase, become polyvalent, and lead to the ultimate failure of the whole programme.

International Pharmacopoeia Available in Spanish

Volume I of the *Pharmacopoea Internationalis*, which appeared in English and in French in 1951, is now available in Spanish. This, the first international pharmacopoeia and the culmination of efforts begun in 1937 by the League of Nations Health Organisation, is a publication of considerable importance to physicians, pharmacists, and others concerned with pharmaceutical preparations. It establishes international standards and nomenclature for drugs and preparations in universal use, and should be especially useful to countries which do not yet have a national pharmacopoeia or to those whose national pharmacopoeia is not up to date.

Monograph on BCG Vaccination in French

A French translation of the WHO monograph *BCG Vaccination*, by Lydia B. Edwards, C. E. Palmer & K. Magnus, has recently been published. This monograph is a report on studies made at the WHO Tuberculosis Research Office, Copenhagen (see *Chronicle of the World Health Organization*, 1953, 7, 75).

Reports of Expert Groups

HEALTH EDUCATION OF THE PUBLIC

Increasing attention is being given to health education as an essential part of all efforts to improve health and general welfare. Health education encompasses much more than instruction in health practices, encouragement of the use of health services, and promotion of specific health projects, although all these are within its province. Rightfully understood, it enters into many aspects of daily living, with numerous opportunities being afforded in family and community activities for direct or indirect learning about health. Such opportunities and ways of taking advantage of them are among the subjects considered in the first report of the WHO Expert Committee on Health Education of the Public.[1]

This first report is considered " an introductory study of health education as an aspect of health work, common to many different activities ". It emphasizes the necessity for adapting health education to the educational, social, economic, and cultural conditions of different countries, and for studying a population thoroughly before embarking upon a health education programme.

The general objective of health education is " to help people to achieve health by their own actions and efforts ", developing in them " a sense of responsibility for their own health betterment as individuals, and as members of families, communities, or governments ". The first step is to make health a " valued community asset ", working through group action aimed at the solution of community problems, whether or not these problems be directly related to health. The next concern is to help individuals in activities having a bearing on health—e.g., child care, family feeding, and food hygiene. In this, social or religious practices may often prove useful as starting points for health education. A third objective is to promote the development and proper use of health services.

In health education, as in general education, planning, methods, and procedures must take into consideration both the learning process and the factors which may have an influence upon the operation of this process. It is stressed in the report that learning is an active process, dependent upon the individual's own efforts. To make the required effort, the individual must be motivated by forces such as goals, interests, or group approval. These forces also determine what is learned. Because each person comes to a given situation with a different background of experience, each reacts differently and learns accordingly. As a general rule, more is learned through real-life experiences than through academic lectures or discussions; and effective learning is based on understanding. This is of primary importance in health education since the desired changes in behaviour and practices are not apt to be made unless the scientific reasons for such changes are really understood.

The health education worker must acquire first-hand knowledge and appreciation of the people with whom, and for whom, he intends to develop a health education programme, so that he can plan and use educational methods which will harmonize with their life and character. If the people believe in indigenous practitioners (e.g., magical practitioners, secular physicians), perhaps the best approach to health education is to work with and through these practitioners. Account should be taken of present knowledge and beliefs, which may provide feelings of security for those of whom they are a part. " The new system of certainties which health education offers can be accepted with good results only

[1] *Wld Hlth Org. techn. Rep. Ser.* 1954, 89. 42 pages. Price : 1/9, $0.25, or Sw. fr. 1.—. Published in English and in French.

when it can be integrated with the existing values and concepts of the group concerned."

The methods and media selected for health education must also be adapted to the local situation. " The health education worker . . . should preserve an experimental attitude to his tools, so that he can be flexible in using them, and critical of their appropriateness." Methods should be chosen which will allow the greatest possible participation of the people themselves, utilizing to advantage their interests and skills.

In the selection of health education media, several factors ought to be considered : (1) costs of production, (2) facilities for local production, and (3) human resources available to produce and use them. The most effective media are those which make the learning most complete and closest to first-hand experience. Ideally, the health educator will choose reality first (e.g., handling a baby is best learned by handling a baby), explaining why certain recommendations are made and providing supervised practice. When models or other forms of substitution must be used, they should be as close to reality as possible.

Since every contact with the public that health workers have is a learning situation, it is important that all types of health personnel be trained in the principles and practice of health education. Some instruction in health education should be included in the training of doctors, nurses, sanitarians, midwives, social workers, nutritionists, and workers in related health disciplines. Attention should be given to the opportunities afforded by the hospital for training and practice in health education of the public; to the possibilities of incorporating instruction in health education in post-graduate courses for doctors, nurses, and others; and to the initiation of in-service training programmes for health and other personnel.

School teachers have a particularly important role to play in health education and should be prepared for assuming this role.

There are many places in which a specialist in health education is called for, and the professional preparation of such specialists must include a good, general, cultural background as well as specific training in educational techniques and supervised field experience.

The WHO report underlines the need for further studies in health education and suggests specific subjects for such studies. It is concluded with an annex describing selected methods and media for use in health education.

Although it is not a detailed study of techniques, this report provides much information on the guiding principles of health education; suggests how programmes should be planned, organized, and evaluated; outlines the factors involved in the selection, development, and use of methods and media; and discusses the training of personnel engaged, directly or indirectly, in health education of the public.

THE ADMINISTRATION OF NURSING SERVICES

Changing social patterns and advances in modern medical care are bringing new demands to bear upon nursing services. More and more, hospitals and other health agencies are feeling the need of assistance in developing nursing services to meet these demands. An effort to aid in one aspect of this problem is represented by the third report of the WHO Expert Committee on Nursing,[1] which deals with the principles of administration of nursing services.

The report defines the objective of nursing services as the provision of the nursing care required for the prevention of disease and the

[1] Wld Hlth Org. techn. Rep. Ser. 1954, 91, 28 pages. Price : 1/9, $0.25, or Sw.fr. 1.—, Published in English and in French.

promotion of health, and of the actual care of the patient, as required in the interest of his mental and physical comfort and by reason of the disease from which he is suffering. Attention is called to the necessity of co-ordinating nursing with the other activities involved in the care of the patient—i.e., those carried on by the doctor, the social worker, and others. This co-ordination may entail the assumption by the nurse of responsibilities usually belonging to these other workers and the consequent delegation of some of the nursing duties to personnel with less training. In any case, however, the total care must be " patient-centred " and all the functions of the health personnel determined by the patients' needs and the limitations of the available service.

In a description of the present stage of development of nursing service, the report stresses the changing role of the nurse : increasingly the nurse is being called upon to perform functions relative to prevention of disease, rehabilitation, and health education, or functions of an administrative nature. Since this means that she has less time for actual patient-care, the assistance of less highly skilled workers becomes essential. Other factors in the present picture of nursing services are the problem of the lack of status of nursing in many countries, which has prevented nurses from assuming the administrative authority rightfully theirs, and the lack of adequate financial support for nursing services. Problems such as these require consideration by all those affected by the activities of nursing and related staff, not just by nurses alone.

For any amelioration in the administration of nursing services, a plan formulated jointly by all those concerned is necessary. The report describes the various steps in the evolution of such a plan and gives two detailed illustrations of planning in the solution of specific problems. It then proceeds to set forth principles of administration, emphasizing the importance of human relations. The fostering of good human relations is considered one of the main tasks of nursing service administration. Many factors are involved, among them the proper exercise of authority, avoidance of tensions, encouragement of outside interests so that nurses may have a well-rounded life, understanding of personal problems, periodic evaluation of performance of duties, promotion of a sense of responsibility, careful assignment of personnel to functions suited to their capabilities and interests, and opportunities for advancement.

An effort is made to translate the principles of administration into action in terms of the division of duties at various levels. The report outlines levels of authority and responsibility of nursing service in a public-health agency and in a hospital, showing the relationships between nurses in certain posts and other health workers. Stress is laid on the principle of assuring that authority be commensurate with responsibility : no one should be held accountable for activities of any kind without being assigned the authority necessary to discharge the responsibility involved. It is suggested that the team method of work can, and should, be used at various levels of the nursing service.

Lack of adequate preparation for the assumption of administrative duties is at the root of many of the difficulties in nursing service administration. In-service or other types of training programmes for graduate nurses are proposed as a possible solution to this problem, and the report suggests elements which should be included in a programme of study for nursing service administration. Small group discussions or working conferences and seminars might be useful adjuncts to, or substitutes for, organized courses.

In summary, the report states : " A clearly defined policy, sound planning, and good human relations are fundamental to effective [nursing service] administration."

Notes and News

Regional Committee for the Western Pacific

The fifth session of the Regional Committee for the Western Pacific was held in Manila from 10 to 16 September 1954. Representatives of 14 Member States participated, together with observers from a number of international organizations. Dr. H. S. Gear, Assistant Director-General of the World Health Organization, attended the session. The Chairman was Dr. F. S. Maclean, representative of New Zealand and Director of the Division of Public Hygiene of that country's Department of Health.

The committee adopted the report of the Regional Director on the activities of 1953-54. It expressed particular appreciation of the increase in the number of fellowships within the Region : 26 intra-regional fellowships within the year as compared with 12 for the previous year. Sixty-one individual fellowships were awarded. Fellows were placed particularly in Australia, Japan, New Zealand, and the Philippines.

The committee re-examined the 1955 budget, which had had to be modified in view of financial restrictions. Dr. Fang, Regional Director, explained how the necessary adjustments had been made : certain savings in 1954 had been transferred for use in 1955, and some projects had been postponed to 1956. Less urgent projects will be implemented if funds become available.

The regional programme and budget for 1956 were approved. The principal activities planned for 1955 and 1956 relate to the control of malaria, tuberculosis, venereal diseases, and yaws; but attention will also be given to professional education and training, maternal and child health, nursing, health education of the public, environmental sanitation, and the strengthening of public-health administrations.

On the proposal of the representative of Australia, supported by the representative of the Philippines, the committee decided that, if economies effected in 1954 and 1955 made the necessary funds available, priority would be accorded to implementing projects requested by Cambodia, Laos, and Viet-Nam that are included in a supplementary list of projects.

Some of the main recommendations or suggestions of the committee were :

—that the Regional Director allocate, in so far as possible, the necessary funds in 1956 for a travel study tour within the Region, for the purpose of promoting closer co-operative efforts;

—that health authorities in the Region be asked to prepare papers on the public-health aspects of virus diseases, particularly insect-borne virus diseases, for the consideration of the relevant WHO expert panel, and that a seminar on the subject be held at a later date if the panel members should think it advisable;

—that the staff of the Regional Office and consultants be required to give first priority to the least favourably situated Member countries.

The committee decided that its sixth session should be held in September 1955 at Singapore.

Technical discussions were held during the course of the fifth session. The subject was "Public health administration, with particular reference to the organization (development) of health departments (services)".

Regional Committee for Europe

The Regional Committee for Europe met at Opatija, Yugoslavia, from 13 to 16 September 1954, under the chairmanship of Professor A. Stampar (Yugoslavia). The governments of 23 countries were represented.

The committee noted with satisfaction the report on 1954 activities submitted by the

Regional Director, Dr. N. D. Begg. This report included a detailed analysis of assistance given to Member governments, revealing, for example, that during the first six months of 1954 WHO awarded 113 fellowships for advanced training and research in the Region, and that co-operation in public health between countries in Europe included thirty separate activities, among them conferences, training courses, and studies of common health problems.

The committee reconsidered the programme and budget for 1955 in the light of modifications required by reduction of the Organization's budget. Without any increase in allocation of funds, however, a training course on treatment of poliomyelitis was added to the programme for the year, since it was felt that the experience gained in countries that had had serious epidemics should be made available to other countries as soon as possible. The treatment methods to be studied were developed in 1952 [1] and reduced the mortality among patients with respiratory and bulbar involvement from above 80% to about 40%. The training course will be held in Denmark early in 1955.

The proposed programme and budget for 1956 were adopted without change, the provisions being essentially for the continuation and consolidation of activities in progress. One addition, however, is the extension of the campaign against communicable eye diseases now being carried out under the auspices of WHO and UNICEF in Morocco (French Zone) and Tunisia to Algeria and Spain. Other proposals include a meeting of experts on virus and rickettsial diseases, and a study of the problem of alcoholism in Europe.

The committee took the final step in dissolving the International Anti-Venereal Disease Commission of the Rhine, in view of the fact that "the objective for which the Commission was created . . . has been achieved, since venereal diseases no longer constitute a problem among Rhine boatmen".[2]

The 1955, 1956, and 1957 meetings of the committee will take place in Vienna, Rabat, and Copenhagen, respectively. Technical discussions are planned for the 1955 session on the subject "Changes in health services necessitated by the ageing of populations", a problem of increasing importance in the European Region.

Regional Committee for South-East Asia

The Regional Committee for South-East Asia met from 21 to 25 September 1954 in New Delhi for its seventh session. It brought together representatives from nine countries, under the chairmanship of Dr. C. K. Lakshmanan (India). The session was opened by Prime Minister Jawaharlal Nehru.

In his report on the activities of the Regional Office for the period July 1953 to July 1954, Dr. C. Mani, Regional Director, stressed the special conditions characterizing the Region, where many countries in the midst of social transformation "want big things and . . . want them quickly". The desire to undertake a large variety of projects sometimes leads to dispersion of effort, but the administrative machinery is not yet fully geared to deal adequately with the enormous social and physical changes that are involved. However, there is great enthusiasm, and important work is already under way. WHO, UNICEF, the Colombo Plan, and FOA (Foreign Operations Administration of the USA) are all lending valuable assistance.

National health budgets are slowly and steadily rising. It is necessary to see to it that the funds are not dispersed too widely, and that "a disproportionate amount does not find its way into hospitals and dispensaries in preference to schemes for safe drinking-water supplies and elementary sanitation".

During the past year, India's nation-wide health programme, for example, included measures such as the protection of 90 million persons against malaria ; plans for rural and urban sanitation improvements ; BCG vaccination of 9 million persons (29 million tested) ; inauguration of a leprosy-control

[1] See *Chron. Wld Hlth Org.* 1954, **8**, 223.

[2] Report on the third session of the International Anti-Venereal Disease Commission of the Rhine (unpublished document EUR/CIAR/3/7, Rev. 1)

programme ; expansion of maternal and child health projects, especially in community projects areas ; and plans for intensification of training of auxiliary health workers. Programmes in other countries included, in addition to projects such as the above, the control of treponematoses, smallpox, plague, brucellosis, trachoma, and typhus ; large-scale training programmes ; and the strengthening of many local medical institutions. WHO awarded 104 fellowships and sponsored and aided the technical training of 2,188 health workers in South-East Asia.

The Regional Committee approved for 1956 an expenditure of $4,700,000, which will be contributed either from the WHO regular budget, by UNICEF, or by the Technical Assistance programme of the United Nations. It drew up detailed proposals for WHO's assistance in more than 120 different projects for Afghanistan, Burma, Ceylon, India, Indonesia, Nepal, and Thailand. It was decided to give high priority to environmental sanitation and to health education. Dr. Lakshmanan expressed the opinion that this emphasis could result in a revolutionary achievement during the next several years.

The committee also gave its attention to the problem of the shortage of physicians in South-East Asia and to the necessity for the readjustment of medical education to meet the actual needs of the Region.[3] Delegates agreed to urge governments to expand training facilities and to orient the curriculum of medical schools towards greater emphasis on the preventive and social aspects of medicine. Similar recommendations were adopted with regard to alleviating the shortage of nurses throughout the Region.

" What is needed now," Dr. Mani declared, " is to achieve strengthening of the public-health directing staff at the central and provincial levels in order to ensure that (1) gains already made are consolidated; (2) major effort is restricted to a few carefully selected priorities; and (3) arrangements for producing adequately trained personnel are intensified and their utilization assured."

The Regional Director informed the committee that Dr. S. F. Chellappah, Deputy Regional Director since 1949, was retiring on 25 September; Dr. Mani paid a warm tribute to the valuable services Dr. Chellappah had rendered to the World Health Organization.

Experts on Health Statistics Meet

Ways and means of improving the collection, compilation, and interpretation of health statistics were the subject of discussion of the WHO Expert Committee on Health Statistics at its fourth session, held in Geneva in mid-September. This committee's work is part of the preparation for the seventh revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death,[4] which is to be completed at an international conference in 1955.

Among the problems considered by the committee was that of the statistical classification of death due to more than one cause. Another was the formulation of a simple classification for use in registering causes of death in underdeveloped areas lacking qualified medical personnel and statistical facilities. Still another subject of study was the improvement of morbidity statistics in more-advanced countries, where precise data on specific diseases are needed as the basis for public-health measures.

Present at this meeting of the Expert Committee on Health Statistics were : Mr. F. F. Harris (Chairman), Dominion Bureau of Statistics, Ottawa; Dr. M. J. Aubenque (Vice-Chairman), Institut National de la Statistique et des Etudes économiques, Paris; Dr. I. M. Moriyama (Rapporteur), Department of Health, Education, and Welfare, Washington, D. C.; Dr. A. H. T. Robb-Smith (Consultant), University of Oxford, Oxford; Dr. Munir Grais, Ministry of Public Health, Cairo; Dr. W. P. D. Logan, Head of the WHO Centre for Classification of Diseases, General Register Office, London; Dr. K. C. K. E. Raja, Ministry of Health,

[3] See *Chron. Wld Hlth Org.* 1954, 8, 298.

[4] See page 327 of this number of the *Chronicle*.

New Delhi; and Mr. H. G. Corbett, Technical Assistant, WHO Centre for Classification of Diseases, Southport.

If publication is authorized by the WHO Executive Board, the report on this session of the Expert Committee on Health Statistics will appear in the *World Health Organization: Technical Report Series* early in 1955.

Review of WHO Publications

Bulletin of the World Health Organization, 1954, **11**, No. 3 : special number devoted to yellow fever in Africa. 194 pages. Price: 10/–, $1.50, or Sw. fr. 6.—. Articles in English or in French, with résumé in the other language.

Yellow fever, which formerly ravaged the American continent and the southern half of Europe, remains endemic in Africa and constitutes a grave threat to vast regions of the world.

The World Health Organization, anxious to fulfil the duties specified in its Constitution, has not ignored the problem; and the International Sanitary Regulations contain special provisions for preventing the spread of yellow fever. WHO centralizes and circulates epidemiological information on the disease and notifies health administrations of endemic or infected areas; it also approves vaccines for use prior to the issue of international vaccination certificates. In addition, WHO assembles technical information on yellow fever, in accordance with the recommendations made in 1949 by its Yellow-Fever Panel.[1]

Within the framework of these undertakings, the WHO Regional Office for Africa organized a seminar on yellow fever in Africa, held at Kampala, Uganda, in September 1953. Some of the main contributions on yellow fever in Africa presented at that seminar are contained in this number of the *Bulletin of the World Health Organization.* Others, especially those dealing with vaccination against the disease, will be the subject of a monograph to appear shortly.

Africa provides a useful field of investigation, and our knowledge of yellow fever there, both in the laboratory and in nature, has been considerably enriched. It was there, for example, that it was discovered that the epidemiology of the disease differed appreciably not only between one continent and another, but also at times—as in Uganda—from one part of the same territory to another. In the first article, A. H. Mahaffy —one of the leaders in this research—gives an account of these differences and of the problem of yellow fever in Africa.

P. H. Bonnel & Z. Deutschman then describe the extent of yellow fever infection in each territory. The results of yellow fever surveys carried out between 1951 and 1953, under the auspices of WHO, with the object of determining the southern limit of the infection are given. Tables and maps portray the most recent investigations, and the distribution of clinical cases reveals the extent of the " silent " areas in Africa.

An article by F. N. Macnamara on a diagnostic procedure for yellow fever in West Africa is of particular interest to public-health and laboratory workers. The isolation of yellow fever virus from the blood of patients can be effected by any adequately equipped laboratory, and this method makes early diagnosis of the disease possible. The necessary health-control measures can thus be instituted with a minimum of delay.

[1] *Wld Hlth Org. techn. Rep. Ser.* 1950, **19**

W. H. R. Lumdsen examines the results of mouse-protection tests on the sera of Africans in Kenya and recalls that, in the evaluation of laboratory data, the possibility of previous vaccinations must be borne in mind. This work refers to Kenya, but the conclusions can, of course, be applied to all territories where human sera have been or will be tested.

Any study of yellow fever epidemiology would be incomplete without a careful entomological survey; knowledge of the species of mosquitos which play a role in the maintenance and transmission of the virus is absolutely essential. B. De Meillon describes such a survey and gives the results of his research on known and possible vectors of yellow fever in southern Africa.

The purpose of all work undertaken on yellow fever is to achieve prevention of the disease and protection of populations at risk. An article by H. Breteau gives details of the preventive measures adopted and of the results obtained by systematic vaccination of the population and control of *Aëdes* within a limited area in French West Africa.

Finally, a collection of short notes and reports refers to yellow fever or its vectors in certain territories : F. Cambournac reports on Angola and the São Tomé and Principe islands; M. Chabaud deals with Ethiopia; M. L. Freedman, with Bechuanaland; W. H. R. Lumsden, with Entebbe airport, Uganda; and M. D. Prates, with Mozambique. These notes contain valuable information for all interested in yellow fever in Africa.

This number of the *Bulletin* does not attempt to deal exhaustively with yellow fever in Africa : much has been accomplished, but much remains to be done. The information and facts given are of considerable importance and will, it is hoped, assist in the task which lies ahead.